Scenario 1: Movie Ticket Pricing

Class Name: `MovieTicket`

Method Name: `getTicketPrice(String day)`

Problem Explanation:

A movie theater offers different ticket prices based on the day of the week:

- Monday to Thursday: ₹200
- Friday: ₹250
- Saturday & Sunday: ₹300

The user inputs the day of the week, and the program should return the correct ticket price.

Expected Input & Output:

Test Case 1

Input: `"Monday"`
Output: `"Ticket Price: ₹200"`

Test Case 2

Input: `"Friday"`
Output: `"Ticket Price: ₹250"`

Test Case 3

Input: `"Sunday"`
Output: `"Ticket Price: ₹300"`

Test Case 4

Input: `"InvalidDay"`
Output: `"Invalid day entered!"`

Scenario 2: ATM Transaction Menu

Class Name: `ATM`

Method Name: `performTransaction(int option)`

Problem Explanation:

A simple ATM interface should provide the following options:

1. Withdraw Money
2. Deposit Money
3. Check Balance
4. Exit

The user selects an option (1-4), and the program should display the corresponding action.

Expected Input & Output:

Test Case 1

Input: `1`
Output: `"Withdraw Money Selected"`

Test Case 2

Input: `2`
Output: `"Deposit Money Selected"`

Test Case 3

Input: `3`
Output: `"Check Balance Selected"`

Test Case 4

Input: `4`
Output: `"Exiting..."`

Test Case 5

Input: `5`
Output: `"Invalid option!"`

Scenario 3: Online Food Ordering System

Class Name: `FoodOrder`

Method Name: `orderFood(int choice)`

Problem Explanation:

A restaurant provides a menu with the following options:

- 1: Pizza - ₹400
- 2: Burger - ₹200
- 3: Pasta - ₹250
- 4: Exit

The user selects a food item, and the program should display the selected item along with the price.

Expected Input & Output:

Test Case 1

Input: `1`
Output: `"You ordered Pizza - ₹400"`

Test Case 2

Input: `2`
Output: `"You ordered Burger - ₹200"`

Test Case 3

Input: `3`
Output: `"You ordered Pasta - ₹250"`

Test Case 4

Input: `4`
Output: `"Exiting..."`

Test Case 5

Input: `5`
Output: `"Invalid choice!"`

Scenario 4: Grade Evaluation System

Class Name: `GradeEvaluator`

Method Name: `getGrade(int marks)`

Problem Explanation:

A school assigns grades based on marks:

- 90-100: A
- 80-89: B
- 70-79: C
- 60-69: D
- Below 60: F

The user enters marks (0-100), and the program should return the appropriate grade. The switch-case will use `marks / 10` to determine the grade range.

Expected Input & Output:

Test Case 1

Input: `95`
Output: `"Grade: A"`

Test Case 2

Input: `85`
Output: `"Grade: B"`

Test Case 3

Input: `72`
Output: `"Grade: C"`

Test Case 4

Input: `66`
Output: `"Grade: D"`

Test Case 5

Input: `45`
Output: `"Grade: F"`

Scenario 5: Traffic Light System

Class Name: `TrafficSignal`

Method Name: `showSignalMessage(String color)`

Problem Explanation:

A traffic light system should return appropriate actions for the following colors:

- `"Red"` → `"Stop!"`
- `"Yellow"` → `"Ready!"`
- `"Green"` → `"Go!"`

The user enters a color, and the program should return the correct message.

Expected Input & Output:

Test Case 1

Input: `"Red"`
Output: `"Stop!"`

Test Case 2

Input: `"Yellow"`
Output: `"Ready!"`

Test Case 3

Input: `"Green"`
Output: `"Go!"`

Test Case 4

Input: `"Blue"`
Output: `"Invalid signal color!"`

Scenario 6: Mobile Recharge Plan

Class Name: `RechargePlan`

Method Name: `getPlanDetails(int amount)`

Problem Explanation:

A mobile service provider offers different recharge plans:

- ₹199: 28 Days, 1GB/Day
- ₹399: 56 Days, 1.5GB/Day
- ₹599: 84 Days, 2GB/Day
- Other: Invalid Plan

The user enters the recharge amount, and the program should return the benefits of the selected plan.

Expected Input & Output:

Test Case 1

Input: `199`
Output: `"Plan: ₹199 - 28 Days, 1GB/Day"`

Test Case 2

Input: `399`
Output: `"Plan: ₹399 - 56 Days, 1.5GB/Day"`

Test Case 3

Input: `599`
Output: `"Plan: ₹599 - 84 Days, 2GB/Day"`

Test Case 4

Input: `299`
Output: `"Invalid Plan"`
